THIS. USE OF OKOMITIC CONTROUNDS FOR THE INHIBITION OF FLK-1 MEDIATED VASCULOGENESIS AND ANGIOGENESIS Inventor(s): Axel ULLRICH et al.

Appl. No.: 09/766,678



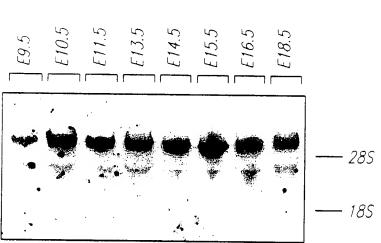
FIG. 1

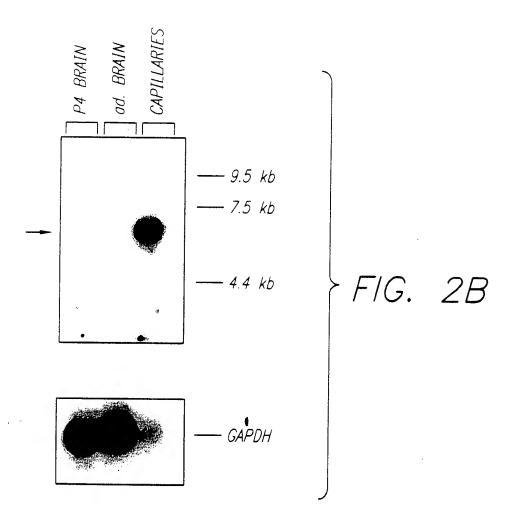
FLK-1 KDR	ILIHIGHHLNVVNLLGACTKPGGPLMVIVEFSKFGNLSTYLRGKRNEFVPYKSKGARFRO
TKR-C	
	GKDYVGELSVDLKRRLDSITSSQSSASSGFVEEKSLSDVEEEEASEELYKDFLTLEHLIC
FLK-1 KDR TKR-C	YSFQVAKGMEFLASRKCIHRDLAARNILLSEKNVVKICDFGLARDIYKDPDYVRKGDARU

FOR THE INHIBITION OF FLK-1 MEDIATED VASCULOGENESIS AND ANGIOGENESIS

Inventor(s): Axel ULLRICH et al. Appl. No.: 09/766,678

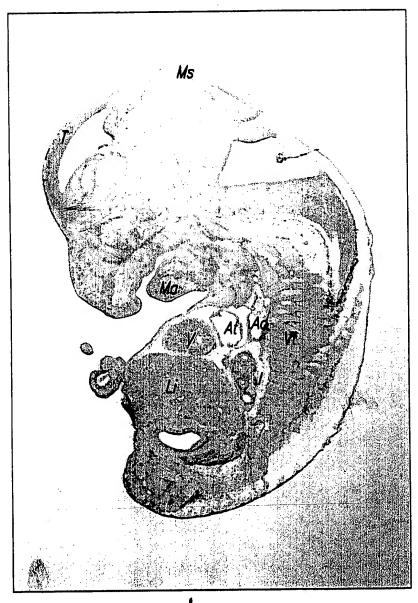
FIG. 2A





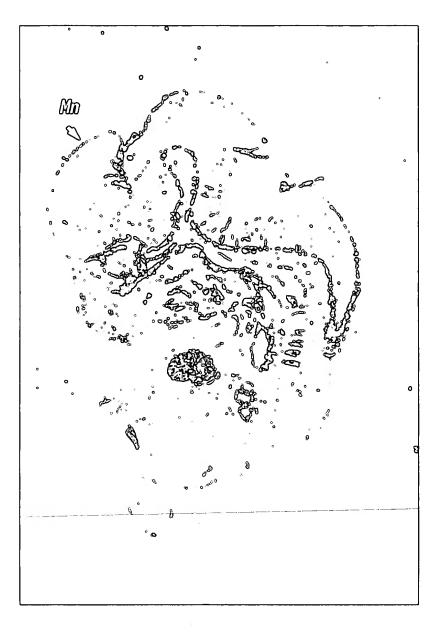
MEDIATED VASCULOGENESIS AND ANGIOGENESIS Inventor(s): Axel ULLRICH et al. Appl. No.: 09/766,678

FIG. 3A



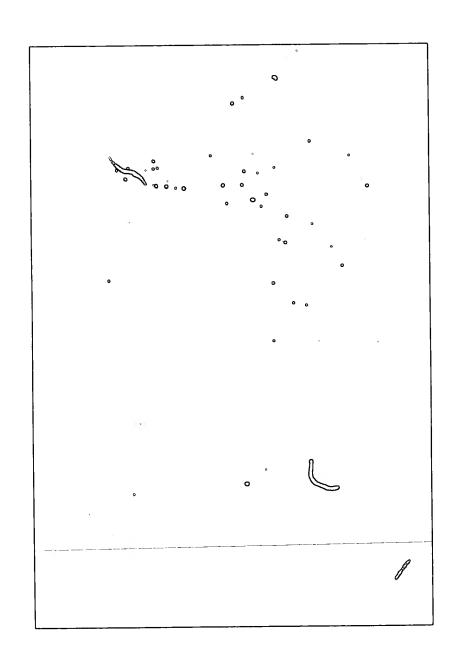
Inventor(s): Axel ULLRICH et al. Appl. No.: 09/766,678

FIG. 3B



Inventor(s): Axel ULLRICH et al. Appl. No.: 09/766,678

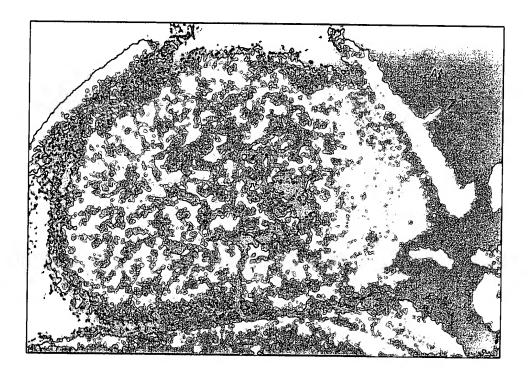
FIG. 3C



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ANGIOGENESIS
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FIG. 4A



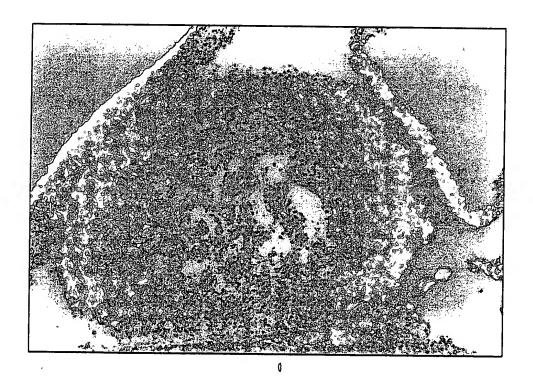
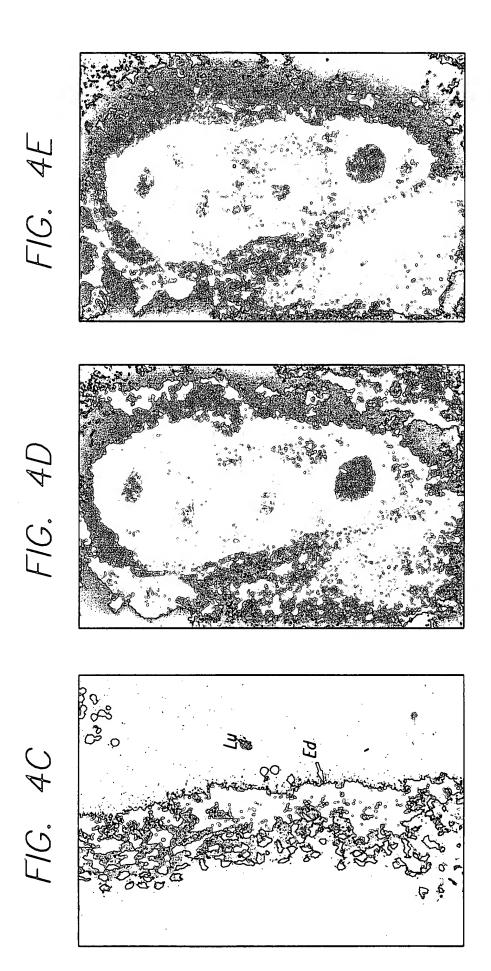


FIG. 4B

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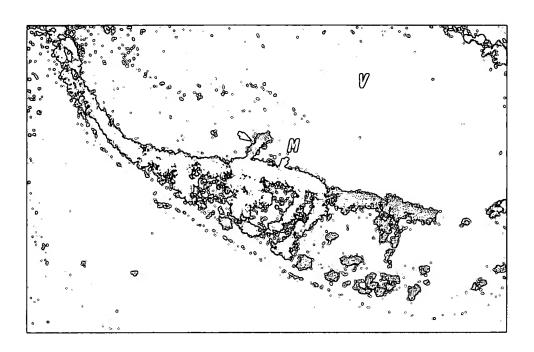


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MEDIATED VASCULOGENESIS AND ANGIOGENESIS Inventor(s): Axel ULLRICH et al.

Appl. No.: 09/766,678

FIG. 5A



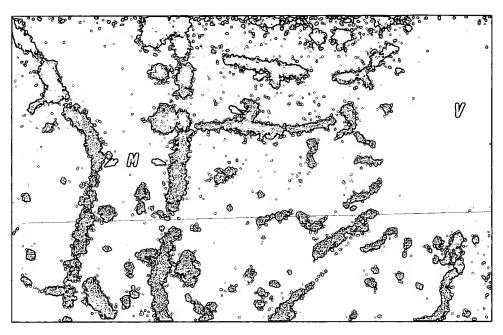
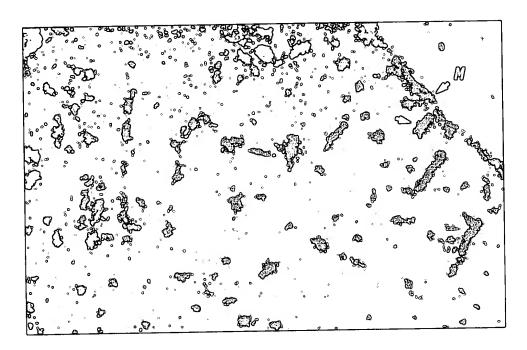


FIG. 5B

ANGIOGENESIS Inventor(s): Axel ULLRICH et al. Appl. No.: 09/766,678

FIG. 5C



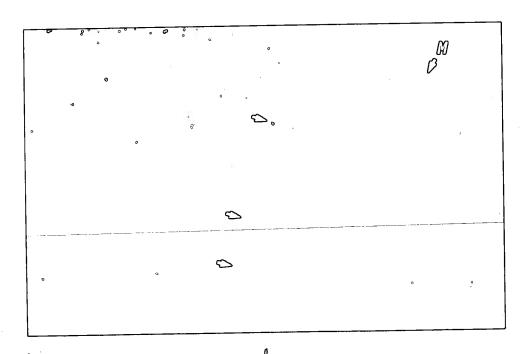
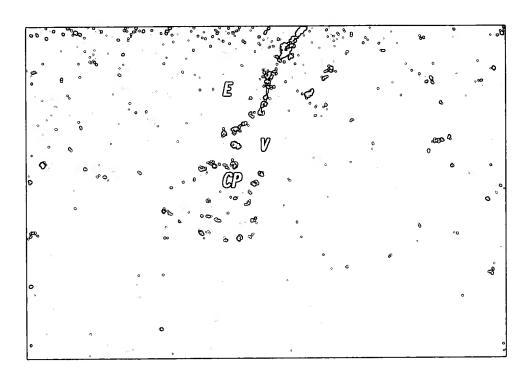


FIG. 5D

MEDIATED VASCULUGENESIS AND F. /

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FIG. 6A



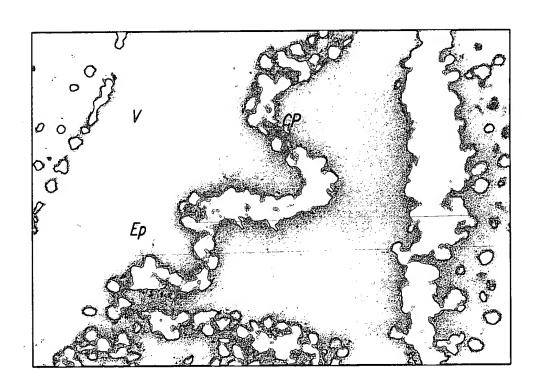
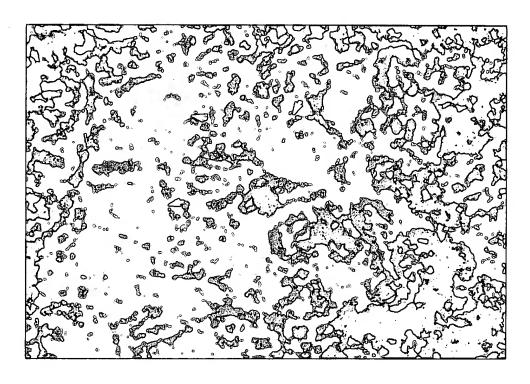


FIG. 6B

MEDIATED VASCULOGENESIS AND ANGIOGENESIS Inventor(s): Axel ULLRICH et al.

FIG. 7A



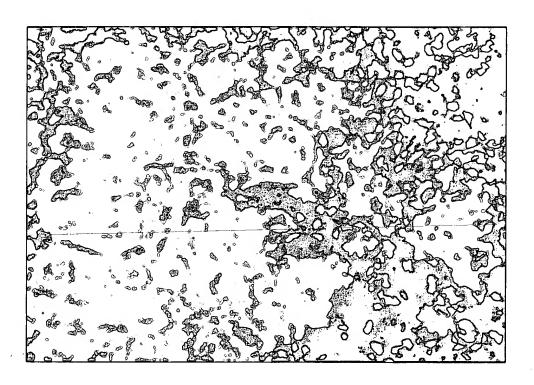
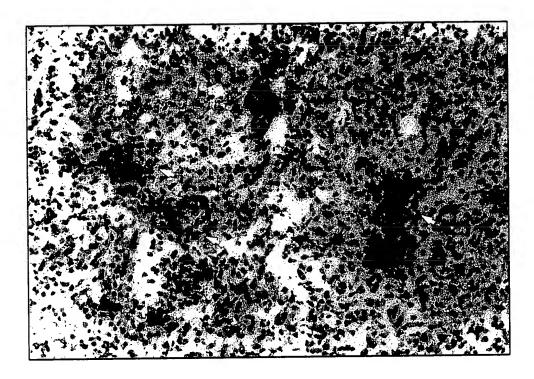


FIG. 7B

MEDIATED YAM THATGENESIS AND ANGIOGENESIS Inventor(s): Axel ULLRICH et al.

FIG. 7C



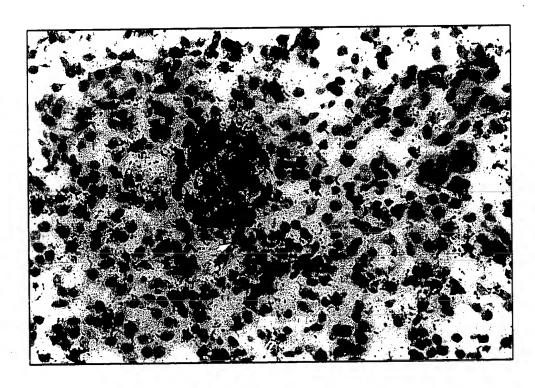
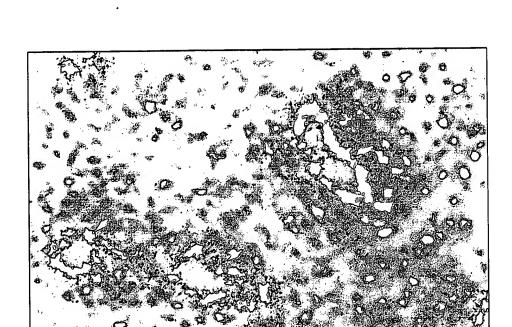
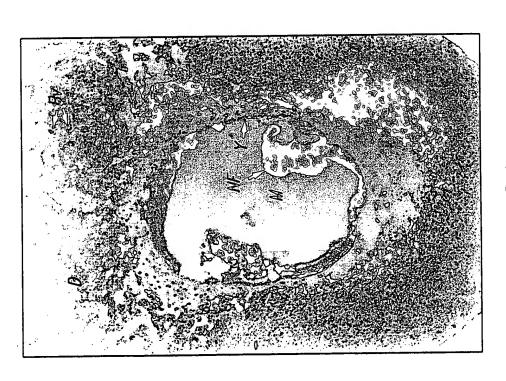


FIG. 7D

Inventor(s): Axel ULLRICH et al. Appl. No.: 09/766,678

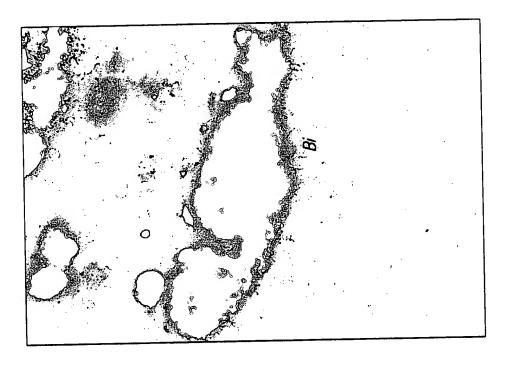


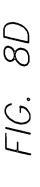
F/G. 8B

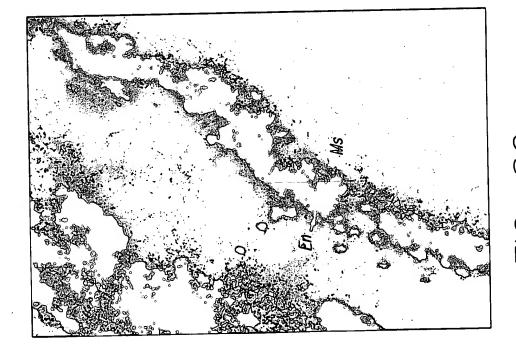


F1G. 84

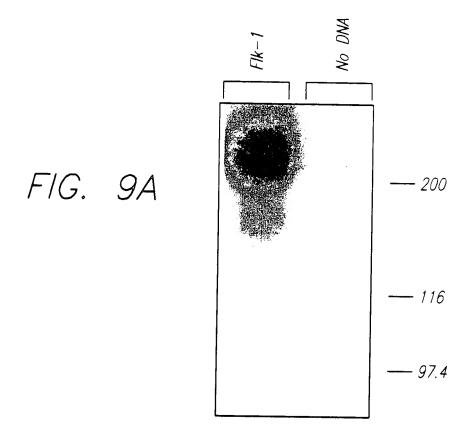
Inventor(s): Axel ULLRICH et al. Appl. No.: 09/766,678

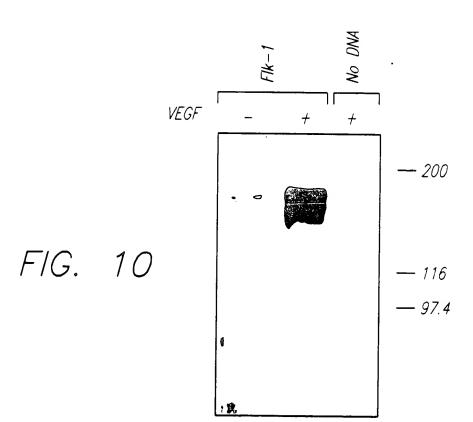




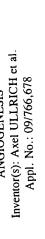


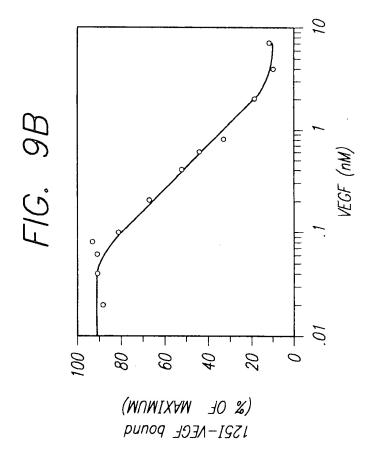
MEDIATED VASCULOGENESIS AND **ANGIOGENESIS** Inventor(s): Axel ULLRICH et al. Appl. No.: 09/766,678

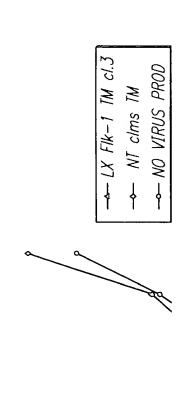




MEDIATED VASCULOGENESIS AND ANGIOGENESIS Inventor(s): Axel ULLRICH et al. Appl. No.: 09/766,678







MEDIA LED VASCULOGENESIS AND ANGIOGENESIS Inventor(s): Axel ULLRICH et al.

Appl. No.: 09/766,678

75 150 225	٩GG	icc/	GGC	TGC	СТ	CT1	TGA	CTG	CCT	CCG	ATA	GCC	GGG	GCG	GC1	TGC	TCT	CCGC	rcc	TCI	CGC	CCG	GCC	GGT	CTG [*] CGC(GAC(
223	L	A	K	S	E	M	Crita	uic	artu	Juc	luu		uru	. 1 ()	uuc	.010	IAAA	iunc	100	arc	1101	iuAc	IAAC	JUAC	UAC
300	ιTC P	CCA H	TC1 L	TTT F	icg <i>i</i> D	TG0 G	GAC T	TTT L	GGG G	rgt V		CGC A		CCG R			CGT V		GGT1 F					AGC A	TGC L
375	GAC Q	iGG0 G	CAG R		TA(GAT I		CCT L		TAC.							CAT I					CAG S			CCC(P
450	G G	CG0 G	ATO C	TG <i>P</i> E	GA(ATT L										CAA N						CCT L	GG <i>A</i> D	AGC(R
525	S S		CAA K	CTA Y	AG(A	TGG G	TAC T	TGA D	AAA N	GG/	GT V	GGT(.V	CAG R	TCC P	CAT I		ACT L	AAA T	CA <i>F</i> K			TAT I	CAG S		GTG(G
600	TG V	CTC S	CGC A	CAT	AT1 F	ACC P	ATC S	CAG R	TA Y	GA [*] D	CG/ R	rgt [.] V	CTA Y	TGT V		TGT V	CAC T			CAT I		.CGT V		CCG R	CGT/ Y
675	GA I	GTC S	AGG G	CCG R	CTO C		GAT I	GGT V	GT V	AC ⁻	:AA/ K						CAT I					GCA H		TGA D	TCA(S
750	CT W		AAT I	CAG R	AAA N		GGA D		GT V								CGC A					CAA N			TTT(S
825	GA I		GGC A	TGA E	CTG C	CTT F	GGT: V	CAT M	GG G	GC(A	TA ⁻ Y	CAG(S	GAT I	CAT M	TTA Y	CAG S	CCC P	TCT L	TAC	CTT F		GAT I	CGA E	.CAG S	GGG <i>A</i> D
900	GA S	TCT L	GAT I	TGT V	TGA D	TTA Y	GAT I	rag R	TA Y	GG/ G	GT# V	GT ⁻ V	TGT(V	AGT V	CAT I		CAT M	TAT				AAC T		TGA D	TCA <i>A</i> N
975	TG V	CAA N	GCT L	AGA E	AAC T	GAG R			TG C	AAT N							TGC A		GCT L	TGA E	AAT I	TGA E	GCA H	CCC P	GCCC P
1050		GAA K																							TGG6 G
1125																									CCTT F
1200																									ATAP Y
1275																									TATI I
1350																									ATCT

MEDIATED VASCULOGENESIS AND ANGIOGENESIS Inventor(s): Axel ULLRICH et al.

Appl. No.: 09/766,678

ГТ	GG(G	GA D	TGA. E	ACT(L	CAC(T	CAT(CAT(M	GGAA E	GTG V	ACT T	ΓGΑ/ E	AAG/ R	AGA [*] D	TGC/ A	AGG/ G	N N	TA(Y	CAC6 T	GT(V	CATO I	CT(L	CAC(T	CAAC N	CCC P	A I	1425
ΓT	TC <i>I</i> S	AAT M	GGA E	GAA <i>I</i> K	ACA(Q	GAG(S	CCA(H	CATO M	GTC V	CTC S	rct(L	GGT V	TGT(V	GAA ⁻ N	TGT(V	CCC <i>F</i> P	P P	CCA0 Q	AT(I	GGT G	GA(E	GAA <i>I</i> K	AGCC A	TTG.	A I	1500
TC	TC(S	GCC P	TAT M	GGA ⁻ D	TTC(S	CTA Y	CCA(Q	GTAT Y	GGG	AC(T	CAT(M	GCA(Q	GAC <i>i</i> T	ATT(L	GAC <i>I</i> T	ATG(C	CAC <i>I</i> T	AGT(V	TA(Y	CGC(A	CAA(N	CCC ⁻ P	rccc P	CTG L	C H	1575
4 C	CA(H	CAT	CCA Q	GTG(W	GTA(Y	CTG W	GCA(Q	GCT <i>A</i> L	AGA <i>F</i> E	AGA/ E	AGC(A	CTG(C	CTC(S	CTA(Y	CAG/ R	ACC(GGG(G	Q Q	AAC <i>I</i> T	AAG(S	P P	GTA [*] Y	TGCT A	TGT. C	A K	1650
	Ε	W	R	Н	٧	Ε	D	F	Q	G	G	N	K	I	Ε	٧	T	K	N	Q	Y	Α	L	Ι	Ł	1725
	G	K	N	K	T	٧	S	T	L	٧	I	Q	Α	Α	N	٧	S	Α	L	Y	K	.с	Ł	А	1	1800
	N	K	Α	G	R	G	Ε	R	٧	I	S	F	Н	٧	I	R	G	Р	Ε	Ι	T	٧	Q	Р	А	1875
	Α	Q	Р	T	Ε	Q	Ε	S	٧	S	L	L	С	T	Α	D	R	N	T	F	E	N	L	I	W	1950
	Y	K	L	G	S	Q	Α	T	S	٧	Н	М	G	E	S	L	T	Р	V	С	K	N	L	U	А	2025
	L	W	K	L	N	G	T	M	F	S	N	S	Τ	N	D	I	L	I	٧	Α	F	Q	N	Α	5	2100
	L	Q	D	Q	G	D	Y	٧	С	S	Α	Q	D	K	K	T	K	K	R	Н	С	L	۷	K	Q	2175
	L	I	Ι	L	Ε	R	М	Α	Р	М	I	T	G	N	L	E	N	Q	T	ì	1	1	G	Ł	!	2250
	I	E	٧	T	С	Р	Α	S	G	N	Р	Ţ	Р	Н	I	T	W	F	K	D	N	Ε	T	L	٧	2325
	Ε	D	S	G	I	٧	L	R	D	G	N	R	N	L	T	I	R	R	٧	R	K	£	D	G	G	2400
	L	Y	T	С	Q	Α	С	N	٧	L	G	С	Α	R	Α	E	Ţ	L	F	i	l	Ł	G	А	Ų	2575
	Ε	K	T	N	L	Ε	٧	I	I	Ļ	٧	G	T	Α	٧	I	Α	М	F	F	W	L	L	L	٧	2550
T	CAT I	TG7	rcci L	TACG R	GAC T	CGT V	TAA K	GCG R	GGC A	CAA N	TGA E	AGG G	iGGA E	ACT L	GAA K	GAC T	AGG G	CTA Y	L	GIC S	IAI	V	M	D D	P	2625

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CAGA ⁻ D	TGA/ E	ATT L	GCC P	CTT L	GGA D	TGA(GCG(R	CTGT C	GAA E	ACG(R	CTT(L	GCC [*]	TTA ⁻ Y	rgat D	rgc(A	CAG(S	CAA(K	STG0 W	GAA E	TT(F	CCC(P	CAGG R	GAC D	C 2 R	2700
GGCT(L	GAA. K	ACT L	AGG. G	AAA. K	ACC P	TCT L	TGG(G	CCG(R	GGGT	rgc A	CTT(F	CGG G	CCA/ Q	AGT(V	GAT [*]	rga(E	GGC <i>A</i> A	AGA(D	GCT A	TTT	rgg <i>i</i> G	ITAA I	GAC D	A Z K	2775
AGAC	AGC A	GAC T	TTG C	CAA K	AAC T	AGT/ V	AGC(A	CGT(V	CAA(K	GAT M	GTT(L	GAA. K	AGA/ E	AGG/ G	AGC/ A	AAC T	ACA(H	CAG(S	GAG E	iCA? H	rcg <i>i</i> R	AGCC A	CTC L	A 2 M	2850
TGTC S							CCA(TCA H	CCA H	TCT L	CAA N	TGT(V	GGT(V	SAA N	CCT(L	CCT <i>I</i> L	AGGC G	GC(A	CTG(CACC	:AAG K	C A	2925
CGGG G	AGG G	GCC P	TCT L	CAT M	GGT V	GAT I	TCT(L	GCA/ Q	ATT(F	CTC S	GAA K	GTT F	TGG. G	AAA N	CCT/ L	ATC. S	AAC [*] T	TTA(Y	CTTA L	CG(R	GGG(CAA0 K	AGA R	A : N	3000
ATGA E	ATT F	TGT V	TCC P	CTA Y	TAA K	GAG S	CAA. K	AGG(G	GGC. A	ACG R	CTT F	CCG R	CCA Q	GGG G	CAA K	GGA D	CTA Y	CGT ⁻ V	rgg0 G	GA(E	GCT(L	CTC(S	GTG V	G D	3075
ATCT L	GAA K	AAG R	IACG R	CTT L	GGA D	CAG S	CAT I	CAC T	CAG S	CAG S	CCA Q	GAG S	CTC S	TGC A	CAG S	CTC S	AGG G	CTT F	rgti V	rga(E	GGA E	GAAA K	ATCG S	C L	3150
TCAG S	TGA D	TGT. V	AGA E	GGA E	AGA E	AGA E	AGC A	TTC S	TGA E	AGA E	ACT L	GTA Y	CAA K	GGA D	CTT F	CCT L	GAC T	CTT(L	GGA(E	GCA H	TCT L	CAT(I	CTGT C	Υ	3225
ACAG S	CTT F	CC <i>F</i> Q	AGT V	GGC A	TA <i>P</i> K	GGG G	CAT M	GGA E	GTT F	CTT L	GGC A	ATC S	AAG R	GAA K	GTG C	TAT I	CCA H	CAG(R	GGA(D	CCT L	GGC A	AGC/ A	ACG <i>A</i> R	N N	3300
ACAT I	TCT L	CC1	rat(S	GG <i>F</i> E	AGA <i>A</i> K	AGAA N	ATGT V	GGT V	TAA K	GAT I	CTC C	TG <i>P</i> D	CTT F	CGG G	CTT L	GGC A	CCG R	GGA D	CAT I	TTA Y	TAA K	AGA(D	CCC6 P	G D	3375
ATTA Y					GAG <i>A</i> D		CCCG R	ACT L	CCC P	TTI L	rga <i>r</i> K	AGT0 W	GAT M	GGC A	CCC P	GGA E	AAC T	CAT	TTT F	TGA D	CAG R	AGT. V	ATA(Y	T	3450
CAAT	TC# Q	AGA(S	GCG/ D	ATG [*] V	TGT(W	GGT(S	CTTT F	CGG G	TGT V	GT1 L	rgc1 L	rct(W	GG <i>P</i> E	I AAA	ATT F	TTC S	CTT L	AGG G	TGC A	CTC S	CCC P	ATA Y	CCC1 P	rG G	3525
٧	K	I	D	Ε	Ε	F	С	R	R	L	K	Ε	G	T	R	М	R	А	Р	υ	Y	1	ı	٢	3600
CAG.	AAA M	TGT Y	ACC Q	AGA T	CCA M	TGC L	TGG/ D	ACT(C	GCT(W	GGC. H	ATG. E	AGG. D	ACC(P	CCA/ N	ACC/ Q	AGA(R	GAC(P	CCTC S	GTT F	TT(S	CAG/ E	AGTT L	GGT V	GG E	3675
AGC.	ATT L	TGG G	GAA N	ACC L	TCC L	TGC. Q	AAG A	CAA/ N	ATG(A	ODC Q	AGC Q	AGG D	ATG G	GCA/ K	AAG D	ACT. Y	ATA [.] I	TTG1 V	TCT L	TC(P	CAA [*] M	rgto S	AGA E	GA T	3750
CAC L	TGA S	GCA M	TGG I E	AAG E	AGG D	ATT S	CTG G	GAC [*] L	TCT S	CCC L	T&C P	CTA T	CCT S	CAC(P	CTG V	TTT S	CCT(C	GTAT M	rgg <i>a</i> E	GG/ E	AAG/ E	AGG <i>A</i> E	AGT V	GT C	3825
GCG D	ACC P	CCA K	AAT F	TCC	TTA:	ATG	ACA N	ACA T	CAG A	CAG G	GAA I	TCA S	GTC H	ATT. Y	ATC L	TCC. Q	AGA. N	ACA(S	STA <i>A</i> K	AGC(R	GAA/ K	AGA0 S	CCG R	GC P	3900

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CAGTG V	SAG [*] S	TGT. V	AAA K	AAC <i>I</i> T	ATT F	TGA <i>l</i> E	AGA D	TAT I	CCC/ P	ATT!	GGA(GGA/ E	ACC <i>I</i> P	AGA. E	AGT V	AAA. K	AGT: V	GAT(CCC P	AGA D	TGA D	CAG S	CCA(Q	GA T	3975
CAGA(CAG S	TGG G	GAT(GGT(V	CCT.	TGC/ A	ATC. S	AGA E	AGA(GCT L	GAA. K	AAC T	TCT(L	GGA. E	AGA D	CAG R	GAA N	CAA. K	ATT L	ATC S	TCC P	ATC S	TTT F	TG G	4050
GTGG/	AAT M	GAT M	GCC P	CAG [*] S	TAA. K	AAG(S	CAG R	GGA E	GTC S	TGT V	GGC A	CTC(S	GGA/ E	AGG G	CTC S	CAA N	CCA Q	GAC T	CAG S	TGG G	iCTA Y	CCA Q	GTC S	TG G	4125
GGTA ⁻	TCA H	CTC S	AGA D	TGA(CAC.	AGA D	CAC T	CAC T	CGT V	GTA Y	CTC S	CAG S	CGA D	CGA E	.GGC A	AGG G	ACT L	TTT L	AAA K	GAT M	GGT V	GGA D	TGC A	TG A	4200
CAGT	TCA H	CGC A	TGA D	CTC.	AGG G	GAC T	CAC T	ACT L	GAG S	CTC S	ACC P	TCC P	TGT V	TTA	ΓΑΑ	ΓGGA	AGT.	GGT	ССТ	GTC	CCG	GCT	CCG	CC	4275
CCCAC CACAC TGCCC GTGG TCTG ACCT GCGC GTCA GAGT GAAG GTCG CCCA TCTA AATT CTAC	TTTT CATT TGA TGG AAG AGGA AGGA AGGA AGG	GATTER	TTTTTCCCACCACCACCACCACCACCACCACCACCACCAC	CAT AGA ATC TGT GGA AAG GCGT GCCT GCCT G	TTT ATG TTA GAA GGA GCG GCTTC GCTT GCTT	TGG TGT TGG TGG GGA GCC CCTA TGCT GGG GGCA	AGG TGA CAAA GCA TGC TTGC ACTC GGCC AGGCC AGGCC AGGCC AGGCC AGGCC	AGGGAAAATGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	GACCACACACACACACACACACACACACACACACACACA	CTC TCTTC TTTC TTGT TTGC TTGC TTGC TTGC	CAGA CCTT CAGA CGTG CGCC CGCC CGCC CCCC CC	CTGCACACACACACACACACACACACACACACACACACAC	CAA CAT GTG AGG TCTG GCTG ACAG TCAA	TCA TCA GAC ATG TAA TGC GTT GAA GAA GAA	ATTI CTCTC GGGT GGGT GCTG GCCTT GCCTTT GCCTTT GCCTTTT	TAAA TGTO TGAG GCTO CGTO CTTAAT AAAO GGTA GTGO ACTT	AGTTGGGATGGGATGGGATGGGATGGGATGGGATGGGA	CAGGCAGGCAGGCAGGCAGGCAGGCAGGCAGGCAGGCAG	ATA GAA GAA GAA GAC GAC GAC GAC GAC GAC GA	ATTALAGE CONTROL OF THE CONTROL OF T	ATGT ATGT AGGCA GGGG GGCCT GGCCT GGG GGGG G	GCC GCC GCC GCC GCC GCC GCC GCC GCC GCC	CTG GCA GGA GGA CCCC AGGA TGGA	CT CC CT AG CT GC AG AC AGA	4350 4425 4500 4575 4650 4725 4800 4875 4950 5025 5100 5175 5250 5325 5393

ANGIOGENESIS Inventor(s): Axel ULLRICH et al. Appl. No.: 09/766,678

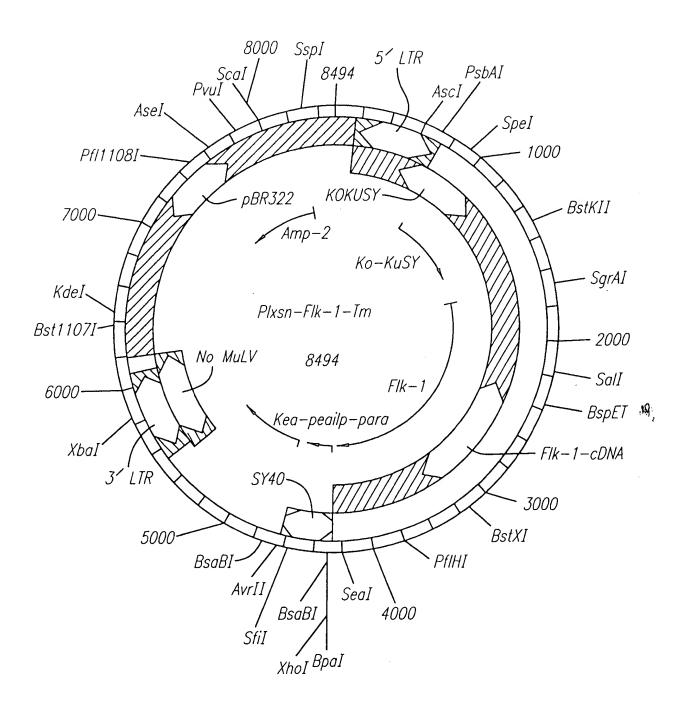
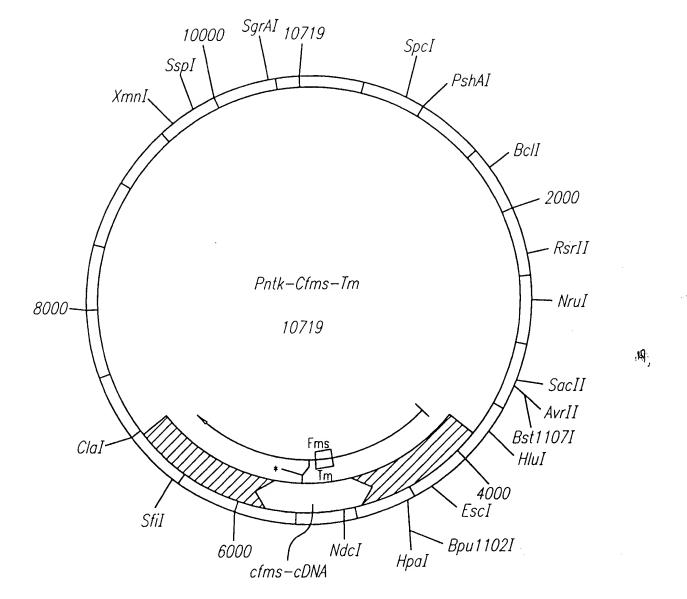


FIG. 12A

ANGIOGENESIS

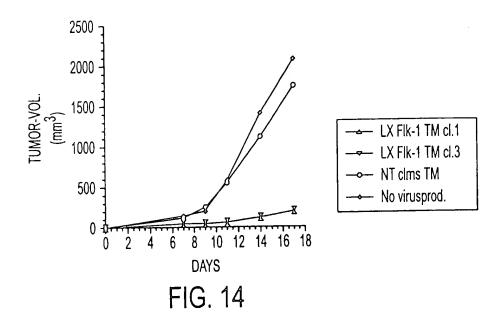
Inventor(s): Axel ULLRICH et al. Appl. No.: 09/766,678

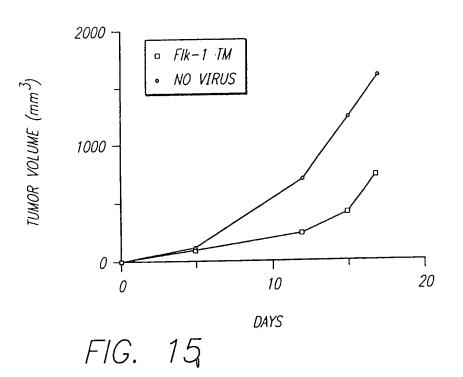


FĮG. 12B

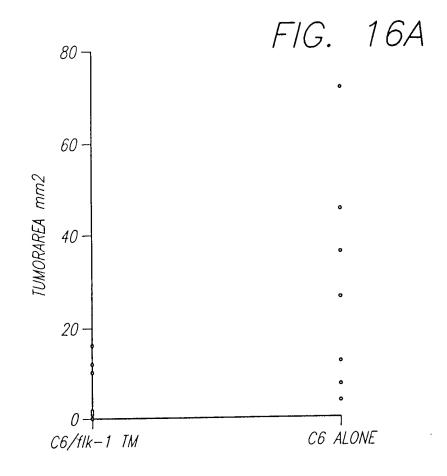
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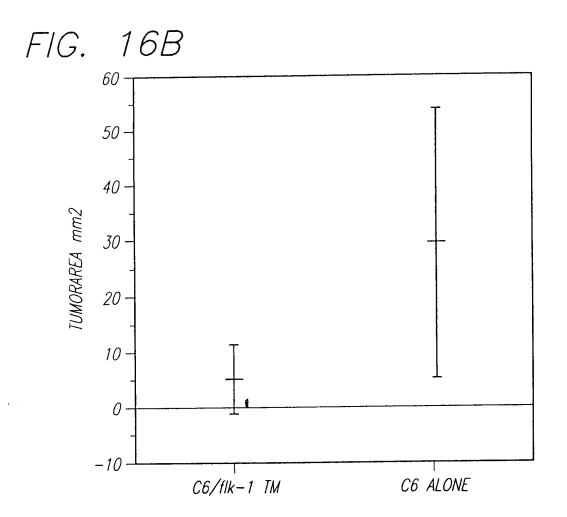
Inventor(s): Axel ULLRICH et al.





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Inventor(s): Axel ULLRICH et al.
Appl. No.: 09/766,678





MEDIATED VASCULOGENESIS AND ANGIOGENESIS Inventor(s): Axel ULLRICH et al.

